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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/701,084

11/04/2003

Scott D. Schwab

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63970

7590

04/06/2007

MH2 TECHNOLOGY LAW GROUP (Cust. No. w/NewMarket)

1951 KIDWELL DRIVE

SUITE 550

TYSONS CORNER, VA 22182

EXAMINER

TOOMER, CEPHIA D

ART UNIT

PAPER NUMBER

1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/06/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/701,084

Applicant(s)

SCHWAB ET AL.

Examiner

Cephia D. Toomer

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1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This Office action is in response to the remarks filed January 22, 2007.

The examiner appreciates Applicant pointing out that the reference cited does not contain a publication date. The examiner apologizes for this inadvertent error. In the absence of a publication date, the rejection is withdrawn.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 8-14, 17-27, 30-36, 39-45, 48-54 and 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwab (US 5,669,938).

Schwab teaches a fuel composition comprising a major proportion of a hydrocarbon middle distillate fuel (diesel, kerosene, gas oils, jet fuel, etc), about 1 to about 40 vol% water and an emission reducing amount of at least one fuel-soluble organic nitrate such as 2-ethylhexyl nitrate (see abstract; col. 2, lines 32-39). The organic nitrate includes nitrate esters of substituted aliphatic alcohols. Preferred nitrates are those having up to about 10 carbon atoms (see col. 2, line 55 through col. 3, lines 1-5 and 10-16). The nitrates are present in the fuel composition in an amount from about 500 to about 50,000 ppm (see col. 3, lines 48-55). Other additives may be included within the fuel composition such as corrosion inhibitors, antioxidants, etc (see

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col. 4, lines 52-60). Also, Schwab teaches that the finished fuel may contain minor amounts of non-hydrocarbonaceous fuels or blending components such as alcohols and dialkyl ethers (see col. 2, lines 4-10). Schwab teaches the limitations of the claims other than the differences that are discussed below.

In the first aspect, Schwab differs from the claims in that he does not exemplify a fuel composition wherein the oxygenates is blended with the fuel. However, no unobviousness is seen in this difference because Schwab teaches that the finished fuels may contain blending agents such as dialkyl ethers. This teaching suggests the combination.

In the second aspect, Schwab differs from the claims in that he does not specifically teach the methods of claims 1, 23, 32, 41 and 50. However, no unobviousness is seen in this difference because it is well settled that the discovery of a previously unappreciated property of a prior art composition does not render the old composition patentable to the discoverer. Thus, claiming of a new use, new function or unknown property does not necessarily make the claim patentable, especially in view of the prior art composition being used in the same environment as the claimed fuel composition.

3. Claims 6, 7, 15, 16, 28, 29, 37, 38, 46, 47, 55 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwab in view of Heneghan (US 6,475,252).

Schwab has been discussed above. Schwab differs from the claims in that he does not specifically teach the claimed sulfur content of the fuel. However, teaches that

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it is known to use diesel fuels that contain 10 ppm or less of sulfur (see col. 1, lines 44-56).

It would have been obvious to one of ordinary skill in the art to use low sulfur fuels because Schwab is concerned about exhaust emissions and specifically teaches that if auxiliary liquid fuels are used with the main fuel that those fuels be desulfurized and Heneghan teaches that low sulfur diesel fuels produce lower levels of pollution (exhaust emissions).

4. Claims 1-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham (US 5,405,417).

Cunningham teaches a fuel composition comprising a major proportion of a hydrocarbon middle distillate fuel (diesel, kerosene, gas oils, jet fuel, etc) wherein the fuel has a sulfur content of less than 500 ppm (see abstract; col. 2, lines 3-8, 24-30). This teaching suggests amount as low as 10 ppm. Cunningham teaches that the finished fuel may contain a minor amount of blending component such as an alcohol or dialkyl ether (see col. 1, lines 49-59). The fuel composition may contain up to 5000 ppm of one or more organic nitrates such as 2-ethylhexyl nitrate (see col. 3, lines 43-64). The composition may contain conventional additives (see col. 4, lines 27-34).

In the first aspect, Cunningham differs from the claims in that he does not exemplify a fuel composition wherein the oxygenates is blended with the fuel. However, no unobviousness is seen in this difference because Cunningham teaches that the finished fuels may contain blending agents such as dialkyl ethers. This teaching suggests the combination.

In the second aspect, Cunningham differs from the claims in that he does not specifically teach the methods of claims 1, 23, 32, 41 and 50. However, no unobviousness is seen in this difference because it is well settled that the discovery of a previously unappreciated property of a prior art composition does not render the old composition patentable to the discoverer. Thus, claiming of a new use, new function or unknown property does not necessarily make the claim patentable, especially in view of the prior art composition being used in the same environment as the claimed fuel composition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 571-272-1126. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Cephia D. Toomer  
Primary Examiner  
Art Unit 1714

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